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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/728,105

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R. Doug Smith

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11/19/2003

EXAMINER

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ART UNIT

PAPER NUMBER

2126

DATE MAILED: 11/19/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/728,105

Applicant(s)

SMITH, R. DOUG

Examiner

Charles E Anya

Art Unit

2126

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 27 August 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-50 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-50 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. §§ 119 and 120**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.  
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_ 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**Claims 1 – 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Pat. No. 5,787,246 to Lichtman et al. in view of U.S. Pat. No. 6,345,319 B2 to Lin et al.**

As to claim 1, Lichtman teaches a Computer System (Computer System 8/Automated Configuration System Col. 10 Ln. 64 – 67, Col. 11 Ln. 1 – 67), a Configuration Information File (Configuration Logic 30 Col. 14 Ln. 57 – 67, Col. 15 Ln. 1 – 67, Col. 16 Ln. 1 – 55), an Executable Software Routine (Driver Loading Module 35 Col. 15 Ln. 33 – 44), and installing the one or more device drivers (Driver Loading Module 35 Col. 15 Ln. 33 – 44, Step 40 Col. 16 Ln. 6 – 18).

Lin teaches the step of reading data from the configuration information file (Step 201 – 209 Col. 2 Ln. 64 – 67, Col. 3 Ln. 1 – 34). It would have been obvious to apply the teaching of Lin to the system of Lichtman. One would have been motivated to make such modification to facilitate normal operation of a new device (Col. 2 Ln. 46 – 63).

As to claim 2, Lichtman is silent with reference to the step of implementing a Plug and Play software routine.

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Lin teaches a method for installing plug and play device. This method for installing plug and play device inherently includes implementing a plug and play software routine because it contains a software routine to open the set-up file (INF) (Col. 2 Ln. 46 – 50).

As to claim 3, Lichtmann teaches the step of creating a configuration information file that includes listing an identification string for the device ("data string..." Col. 17 Ln. 62 – 67, Col. 18 Ln. 1 – 30).

As to claim 4, Lichtman teaches the step of creating a configuration information file that includes listing an information folder of where information about a device is stored ("...nonvolatile memory..." Col. 18 Ln. 31 – 42: File identifier is not explicitly taught however the nonvolatile memory must have an indicator/memory address that identifies where device information is stored).

As to claim 5, claim 4 covers claim 5 except for listing the corresponding file to be deleted prior to installing a new device driver.

Lin teaches listing the corresponding file to be deleted prior to installing a new device driver (Step 205 Col. 3 Ln. 9 – 12).

As to claim 6, Lichtman teaches creating a configuration information file that includes listing a command for initiating the executable software routine for installing a device driver (Although the listing of a command is not explicitly taught driver loading module is initiated for installed a device driver and as such must include a command/instruction that notifies the driver loading module of when to start driver loading Col. 15 Ln. 33 – 43).

As to claim 7, see the rejection of claim 6.

As to claim 8, Lichtman is silent with reference to step of reading data that includes reading an identification string.

Lin teaches the step of reading data that includes reading an identification string (Step 202 Col. 3 Ln. 1 – 2).

As to claim 9, Lichtman is silent with reference to step of reading data that includes reading an information folder.

Lin teaches the step of reading data that includes reading an information folder (Step 205 Col. 3 Ln. 9 – 12).

As to claim 10, see the rejection of claim 5.

As to claims 11 and 12, see the rejection of claim 6.

As to claim 13, Lin teaches step of installing a device driver that includes searching a system information file for an identification string and removing the identification string from the system information file if the identification string is present (Col. 2 Ln. 46 – 67, Col. 3 Ln. 1 – 34). It would have been obvious to apply the teaching of Lin to the system of Lichtman. One would have been motivated to make such a modification in order to install a plug and play device (Col. 2 Ln. 46 – 47).

As to claims 14 and 15, see the rejection of claim 13.

As to claim 16, Lichtman teaches the step of installing a device driver that includes pointing an installation program to an information folder where information about the device is stored (Enumerator 150 Col. 25 Ln. 54 – 67).

As to claim 17, Lichtman teaches step of installing a device driver that includes placing information found in the formation folder in an operating folder ("...predefined file..." Col. 20 Ln. 25 – 34, .INF files Col. 24 Ln. 1 – 15).

As to claim 18, Lichtman teaches the step of installing the operating system in a local hard disk drive ("...fixed disk drive..." Col. 11 Ln. 55 – 67) and the information in a system registry (System Registry 153 Col. 28 Ln. 50 – 67).

As to claim 19, Lin teaches step of installing a device driver that includes deleting a file associated with a device driver that is being removed ("...deleting..." Col. 2 Ln. 46 – 57, Step 209 Col. 3 Ln. 31 – 34).

As to claim 20, see the rejection of claim 1.

**Claims 21 – 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Pat. No.5,787,246 to Lichtman et al. in view of U.S. Pat. No. 6,345,319 B1 to Lin et al. as applied to claim 1 above, and further in view of U.S. Pat. No. 6,094,679 to Teng et al.**

As to claim 21, Lichtman as modified in claim 1 is silent with reference to the step of executing a command that removes the device driver by making a set of API calls. Teng teaches removing device driver/software files (Col. 9 Ln. 55 – 67, Col. 10 Ln. 1 – 10). Teng does not explicitly teach using a set of API calls to remove the device driver but being that the system of Teng is object oriented the use of a set of API calls is implicitly taught.

As to claim 22, Lichtman as modified in claim 1 is silent with reference to the step of executing a command that updates the device driver by making a set of API calls. Teng teaches the step of executing a command that updates the device driver by making a set of API calls (Server Script Component 76 Col. 8 Ln. 59 – 67, Col. 9 Ln. 1 – 26). It would have been obvious to apply the teaching of Teng to the system of Lichtman as modified. One would have been motivated to make such a modification in order to package all necessary driver software files for installation (Col. 8 Ln. 64 – 67).

As to claim 23, see the rejection of claim 22.

As to claim 24, Lichtman as modified in claim 1 is silent with reference to the step of presenting a user interface that contains one or more selectable buttons. Teng teaches the step of presenting a user interface that contains one or more selectable buttons (“graphical user interface...” Col. 7 Ln. 8 – 28). It would have been obvious to apply the teaching of Teng to the system of Lichtman as modified. One would have been motivated to make such modification to provide an interface for selecting a printer/driver to initiate installation process (Col. 7 Ln. 8 – 28).

As to claim 25, Teng teaches the step of activating a selectable button that enables the installation of multiple device drivers (“...drivers...” Col. 8 Ln. 21 – 48).

As to claim 26, claim 13 covers claim 26 except for generating selectable button on the user interface.

Teng teaches generating selectable button on the user interface (see claim 24 for rejection).

**Claims 27 – 47 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Pat. No. 5,767,246 to Lichtman et al. in view of U.S. Pat. No. 6,345,319 B2 to Lin et al. in further view of U.S. Pat. No. 6,094,679 to Teng et al. as applied to claim 24 above, and further in view of U.S. Pat. No. 6,405,362 B1 to Shih et al.**

As to claim 27, claims 1 and 24 covers claim 27 except for a motherboard, a processor, a memory device, a removable media player and removable media. Lichtman teaches a motherboard (“...board...” Col. 13 Ln. 44 – 55), a processor (CPU 12 Col. 12 Ln. 1 – 35; NOTE: the CPU 12 is inherently connected to a motherboard), a memory device (Memory Storage Device 29 Col. 13 Ln. 44 – 55).

Lichtman as modified is silent with reference to a removable media player and removable media.

Shih teaches a Removable Media Player (Optical Disk Drive 30 Col. 4 Ln. 55 – 60) and Removable Media (Removable Optical Disk 31 Col. 4 Ln. 55 – 60). It would have been obvious to apply the teaching of Shih to the system of Lichtman as modified. One would have been motivated to make such modifications to provide read/write operation on a removable disk (Col. 4 Ln. 55 – 60).

As to claim 28, Shih teaches an autorun file that automatically runs when the removable media is inserted into the removable media player (Autorun Program 215 Col. 7 Ln. 19 – 67, Col. 8 Ln. 34). It would have been obvious to apply the teaching of Shih to the system of Lichtman as modified. One would have been motivated to make such a modification to reduce the amount of processing required of the shell/operating system (Col. 7 Ln. 31 – 40).



As to claim 29, see the rejection of claim 27.

As to claim 30, claim 27 covers claim 30 except for a first device driver.

Lichtman teaches a First Device Driver (Step 58 Col. 19 Ln. 10 – 26).

As to claims 31 – 36, see the rejection of claims 2 – 7 respectively.

As to claims 37 and 38, see the rejection of claims 25 and 26 respectively.

As to claims 39 – 47, see the rejection of claims 1 and 13, 16 – 23 respectively.

As to claims 48 and 49, see the rejection of claim 27.

As to claim 50, see the rejection of claim.

### ***Response to Arguments***

2. Applicant's arguments filed 8/27/03 have been fully considered but they are not persuasive.

Applicant argues that the Lichtman prior art reference does not teach the act of creating a configuration information file.

Firstly, the Lichtman prior art reference should not be taken in isolation of the Lin prior art reference, as Applicant seems to suggest. The combination of the Lichtman and Lin prior art references is used in the rejection. The limitations that are missing in the Lichtman prior art reference are covered in the Lin prior art reference of which the act of creating a configuration information file is one.

Applicant also argues that the Lin prior art reference does not teach “reading data from the configuration information file, where the data identifies actions to be accomplished as well as information to be used to install one or more device drivers”.

Referring to Lin prior art reference's abstract, it reads as follows "The present invention relates to a setting method for installation of plug and play device by **utilizing** the set-up file (INF) of a hardware driver...copy the driver file to the corresponding directory".

**Utilizing** data that includes device ID and device class (see the figures 2 and 3) the installation of driver file and subsequently the plug and play device. On page 11 lines 10 – 20 of Applicant's response, Applicant rightfully agrees that the Lin prior art reference uses the set-up files (INF files) for the installation of devices. The INF file is not different from configuration information file because reading the INF file that includes device ID and class would achieve the installation of drivers/devices.

In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper.

Applicant argues that the references do not teach a user interface module that displays selectable buttons that enables the selections of device drivers to be installed but fails explain how the limitation is not covered. Therefore, the Examiner maintains that the references used in the rejection covers the invention as claimed.


### ***Conclusion***

3. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Charles E Anya whose telephone number is (703) 305-3411. The examiner can normally be reached on M-F (8:30-5:30) First Friday Off. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 746-7239 for regular communications and (703) 746-7240 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

  
JOHN FOLLANSBEE  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2100

Charles E Anya  
Examiner  
Art Unit 2126